

REMARKS

Claims 1-19 are pending in the application.

Claims 1-19 have been rejected.

Claims 1-19 have been objected to.

Claim 1 has been amended. This claim has been amended to provide clarity as to the subject matter of the claim and, unless specifically stated otherwise below, the amendments are not believed to otherwise restrict the subject matter of the claim. This amendment finds support in at least Figure 10 of the Application and the associated text.

Double Patenting

Claims 1-19 are provisionally rejected under the judicially created doctrine of double patenting (obviousness-type) as being unpatentable over claims 20-86 of co-pending Application No. 10/936,087. In response, a terminal disclaimer is filed herewith. This terminal disclaimer is submitted to overcome the rejection expressed in the Office Action and to thereby advance prosecution. By the filing of the terminal disclaimer, Applicant is in no way admitting, either explicitly or implicitly, that the currently pending claims in either the present Application or in the co-pending Application are not patentable distinct, as suggested by the Office Action.

Rejection of Claims Under 35 U.S.C. §112

Claim 1 stands rejected under 35 U.S.C. §112, second paragraph as purportedly being vague and indefinite “because it recites only a single means and thus encompasses all possible means for performing a desired function.” Applicant respectfully traverses this rejection.

The Office Action states that “Claim 1 recites a single means or step,” as justification for the 35 U.S.C. § 112 para. 1 rejection. *See* Office Action, p.2. Applicant respectfully submits that Claim 1 claims neither a means nor a step. Claim 1 is directed toward “A frame structure comprising super-channel information, wherein said super-channel information comprises information regarding a super-channel, and said super-channel comprises a plurality of sub-channels.” The clear claim language contains neither functional “means” language nor “step” language. Nor can any limitation of Claim 1 be interpreted as “means” or “step” language. In this light, the 35 U.S.C. § 112 rejection in the Office Action is misplaced.

The Office Action cites to several sections of the MPEP in support of this rejection, but several deficiencies are associated with these sections. MPEP 706.03(c) does not relate to the stated issue in the Office Action. MPEP 706.03(n) and 706.03(z) do not exist in the current version of the MPEP. *See* MPEP 8th Ed., rev. 3. Should the Examiner be relying upon the statements made in MPEP 2164.08(a), Applicant reiterates that Claim 1 is not a “means” or “step” claim and therefore this section does not apply to that claim.

For at least these reasons, Applicant respectfully submits that Claim 1 is allowable under 35 U.S.C. § 112, para. 1. Applicant requests Examiner's reconsideration and withdrawal of the rejection, and an indication of the allowability of same.

Rejection of Claims Under 35 U.S.C. §102

Claims 1-6, 9, 18, and 19 stand rejected under 35 U.S.C. §102(e) as purportedly being anticipated by U.S. Patent 6,697,381 issued to Talbot et al. ("Talbot"). Applicant respectfully traverses this rejection.

As an initial matter, the Applicant further submits that the particular parts of Talbot that the Examiner has relied upon have not been designated as clearly as practicable, and the pertinence of those cited sections of Talbot has not been clearly explained, both as required by 35 C.F.R. §1.104(c)(2). Nevertheless, the Applicant has made every attempt to respond to the rejections recited in the Office Action.

Claim 1: Independent Claim 1 of the present application, as amended, is directed toward a frame structure comprising "super-channel information." As amended, the claim states that "said super-channel information comprises information regarding a super-channel, and said super-channel comprises a plurality of sub-channels linking a first and second network element." These sub-channels carry data transmission between the network elements.

Applicant respectfully submits that the cited disclosure of Talbot does not illustrate or describe super-channel information in a frame, because Talbot fails to discern the existence of super-channels, as that term is defined in Claim 1 and in the specification, and fails to provide any disclosure in this regard. Talbot relates to "a

system and packet data frame for transferring a data signal in a contiguous sequence over a channel.” Talbot 1:11-13. The Talbot disclosure provides for a variable length data packet frame that allows for a data signal of any length to be transferred without having to break the data signal into smaller fixed sized data packets. *See* Talbot 5:29-40. Talbot states that an advantage of such a system is that it “avoids having to reassemble the data signal from a plurality of data packets.”

In fact, a result of employing the claimed super-channel made up of sub-channels is exactly this: a high bandwidth data stream is broken into units of data that are then spread across the sub-channels of the super-channel. In so doing, the aggregation of sub-channels into a super-channel allows the high-bandwidth data stream to be carried by this aggregation of sub-channels (the super-channel), when one of the sub-channels, taken alone, would be unable to convey the high-bandwidth data stream. Thus, information specific to a super-channel is antithetical to Talbot, as such information describes an aspect of a scheme that Talbot clearly and stridently eschews. In fact, since Talbot fails to disclose a super-channel, as that term is used in the amended claims, Talbot could not be expected to provide “super-channel information” in a frame structure.

The cited Talbot Figures 4, 4A, 4B, 4C and 4D illustrate Talbot’s data frame. Figure 4B illustrates that a header of Talbot’s data frame can include packet control words (74) and a synchronization code (72). Talbot further discloses that a packet control word (74) can include, per Figure 4C, a word count (80) and a stream identifier (82). Since Talbot’s data frames are disclosed to be variable length, “the word count portion 80 corresponds to the number of data words 77 that comprise a data packet 76”, that is a part of Talbot’s data frame. *See* Talbot 6:9-13. Talbot further states that the

word count portion (80) can include any suitable information identifying the length of the data packet portion of the data frame. *See* Talbot 6:14-17. The stream identifier (82) is disclosed to be comprised of a user code (84), stream type (86) and a unit identifier (88).

Talbot discloses these components of the stream identifier to be as follows:

Preferably, the user portion 84 corresponds to information related to the format or standard of the data being transmitted, such as for example, a TCDL standard or a proprietary user format. The stream type portion 86 preferably includes information corresponding to the type of data being transmitted such as, for example, acoustic, MPEG, SAR, etc. The unit ID portion 88 preferably includes information corresponding to the sensor or device associated with the data. In an alternate embodiment, the stream ID portion 80 could be formatted in any suitable manner that provides the routing information for the data packet 76. The stream ID portion 80 could also include reserve blocks or portions for other information.

Talbot 6:29-38. Talbot discloses the synchronization code (72) as “a start of packet synchronization code and is used to identify a transmitted data packet frame.” Talbot 6:40-42.

Applicant respectfully submits that none of the above disclosure of Talbot’s data frame corresponds to super-channel information, as noted previously. Talbot’s disclosure, as discussed above, relates to information about the data frame itself or the data packets encapsulated within a data frame (e.g., length of the data packet within the data frame, format or standard of the data, type of data being carried, and identifier of appropriate receiving data decoder).

Applicant further submits that Talbot 2:39-59 and Talbot 3:37-45, both cited in the Office Action against Claim 1, provide no disclosure of a data frame. While these sections of Talbot do make reference to a “superchannel” as a “packet channel,” there is no disclosure of what Talbot means by the disclosed “superchannel.” Regardless, there is

no disclosure of incorporating information about Talbot's "superchannel" in a data frame, as discussed above.

For at least these reasons, Applicant respectfully submits that Talbot does not disclose the limitations of Claim 1.

Claims 2 and 9: Dependent Claims 2 and 9 include additional limitations directed toward information that super-channel information comprises (e.g., super-channel identifier, and alternate super-channel information). For the reasons stated above with regard to Claim 1, Applicant submits that Talbot provides no disclosure of super-channel information in a frame.

Further, none of Talbot's frame disclosure corresponds to a super-channel identifier or alternate super-channel information, such as an alternate super-channel identifier. In addition, Applicant submits that the cited sections of Talbot provide no disclosure of an alternate super-channel, and therefore there would be no purpose served by having alternate super-channel information in Talbot's data frame. For at least these reasons, Applicant respectfully submits that Talbot does not disclose Dependent Claims 2 and 9, and therefore further does not disclose any claims dependent therefrom (Claims 3-19).

Claim 3: Dependent Claim 3 contains an additional limitation wherein the frame structure of the present invention includes sub-channel information. Applicant respectfully submits that Talbot does not describe a super-channel that is comprised of sub-channels, as is disclosed in the present application (and claimed in Claim 1). The present application describes a framer in a transmit section of the disclosed device

receiving data and distributing that data across several outgoing sub-channels and encapsulating each of those datastreams in corresponding frames. *See* Application, p.12, 11.23-30. The Application further discusses transmit port speed as being a multiple of the outgoing sub-channel speeds or data rates. *Id.* No such description of sub-channels is provided in Talbot nor is an alternative description of sub-channels provided.

Talbot uses the phrase “dynamically allocating the size of the channel” (Talbot 5:33), but that phrase is disclosed to refer to “the capability of the present invention to transfer a data signal in a contiguous sequence from the transmit side 4 to the receive side 6 of the channel 8 (by varying the length of the data packet).” Talbot 5:31-37 (referring to Figure 1). Applicant respectfully submits that such variable length data frames do not correspond to a sub-channel of the present invention. Data is not described as being spread out over several of these data frames. Instead, Talbot attempts to maximize information in one frame without a break, in order to achieve contiguous transmission. Also, as discussed above with regard to Claim 1, information contained within packet control words (74) relate to the data frame and its encapsulated data packet, not to information related to a sub-channel over which the frame is transmitted.

For at least these reasons, Applicant respectfully submits that Talbot does not disclose the limitations of Claim 3 or those claims dependent therefrom (Claims 4-19).

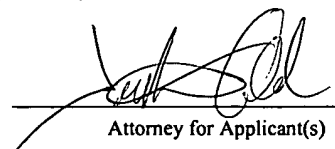
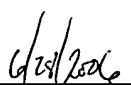
Claims 4-6, 18, and 19: Dependent Claims 4-6, 18, and 19 all contain additional limitations relating to sub-channel information. As discussed above with regard to Claim 3, Applicant submits that Talbot does not provide disclosure of a frame comprising sub-channel information. Applicant further submits that nothing in Talbot’s data frame

corresponds to the information included in the additional limitations of the present dependent claims (e.g., a sub-channel identifier, a sub-channel bitmap representing operational states of the sub-channels, and sub-channel state information). For at least these reasons, Applicant respectfully submits that Talbot does not anticipate these dependent claims.

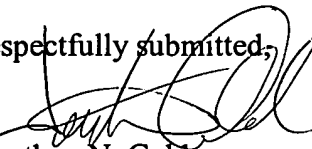
For at least the reasons stated above, Applicant respectfully submits that Claims 1-6, 9, 18, and 19 are allowable over Talbot and Applicant respectfully requests Examiner's reconsideration of the stated rejections and an indication of the allowability of these claims.

CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5090.

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|  _____ Attorney for Applicant(s) |  _____ Date of Signature |

Respectfully submitted,


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